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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,103	10/15/2001	Yoshihiko Kikuchi	35.C15871	9322
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FITZPATRICK CELLA HARPER & SCINTO				
30 ROCKEFELLER PLAZA				
NEW YORK, NY 10112				
EXAMINER				
YOON, TAE H				
ART UNIT		PAPER NUMBER		
1714				

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/976,103

Applicant(s)

KIKUCHI, YOSHIHIKO

Examiner

Tae H Yoon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-19 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-4, 6, 8, 13-15, 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "derivatives" is indefinite in not specifying particular functional groups or substituents absent any definition in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 12-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 5-185556 or WO

96/05238.

JP teaches the reaction of molasses or polysaccharide waste and MDI (methylene diisocyanate) in the presence of polyethylene glycol and silicone, and polyurethane foam thereof in abstract. Said polyurethane foam has a three dimensional network and said molasses and polysaccharide waste inherently contain the instant glucose, oligosaccharide and derivatives thereof. Said polyurethane foam is a shock absorbing medium. The instant claims 12-19 do not require said three dimensional network though.

WO teaches the same in abstract.

With respect to claims 3, 4, 14 and 15, see *In re Brown*, 459 F2d 531, 173 USPQ 685 (CCPA 1972) and *In re Thorpe*, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985); an invention in a product-by-process is a product, not a process. Any molasses and polysaccharide waste would meet the instant glucose, oligosaccharide and derivatives thereof.

With respect to claims 7, 8, 18 and 19, the recited limitation is an optional when said claim is combined with the claim from which is dependent.

Thus, the instant invention lacks novelty.

Claims 1-9 and 12-19 are rejected under 35 U.S.C. 103(a) as obvious over JP 6-128348 and JP 5-185556.

JP'348 teaches the reaction of molasses and polyisocyanate in the presence of polyhydric alcohol, and polyurethane composite thereof in abstract. Said polyurethane

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composite has a three dimensional network and said molasses inherently contain the instant glucose, oligosaccharide and derivatives thereof.

The instant invention further recites an aliphatic compound and polyalkylene glycol over JP'348. However, the use of said aliphatic compound (MDI, methylene diisocyanate) and polyethylene glycol in a reaction with a saccharic compound is well known as taught by JP'556.

It would have been obvious to one skilled in the art to utilize the art well known aliphatic compound (MDI, methylene diisocyanate) and polyethylene glycol taught by JP'556 in JP'348 since said polyisocyanate and polyhydric alcohol encompass MDI (methylene diisocyanate) and polyethylene glycol, respectively.

Claims 1-10 and 12-19 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 2000-143702.

JP teaches the reaction of saccharide compounds and aliphatic diacid in the presence of triadipate and molded articles thereof in abstract. Said molded articles inherently absorb shocks and have a three dimensional network.

Thus, the instant invention lacks novelty.

Claims 1-9 and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dordick et al (US 5,270,421) in view of JP 2000-143702.

Dordick et al teach the reaction of a sugar and an organic multi-acid and crosslinked polymers thereof in abstract and examples and at col. 5, line 63 to col. 6, line 41. Said crosslinked polymers absorb shocks inherently.

The instant invention further recites the use of a plasticizer over Dordick et al. But, the use of a plasticizer during polymerization in order to improve its processibility or flexibility or impact strength of the molded product is well known and JP teaches such practice.

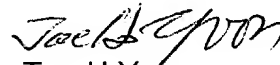
It would have been obvious to one skilled in the art to utilize the art well known plasticizer such as an ester of JP in Dordick et al in order to improve its processibility or flexibility or impact strength of the molded product is a routine practice in the art.

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tae H Yoon
Primary Examiner
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THY/February 20, 2004